

In the Drawings

Please amend Figures 1, 2 and 3 with the replacement drawing sheets attached hereto. Figure 1 is amended to include the reference number 36 to identify the load cell described in the specification and to correctly identify the location of the drive motor 30 described in the specification. Figure 2 is amended to include the reference number 38 to identify the axle described in the specification and reference number 36 to identify the load cell described in the specification. Figure 3 is amended to include the reference number 32 to identify the motor drive connection described in the specification and to more correctly identify the locations of the fork 50, the pegs 52, and the block 54 of the motor drive connection 32 described in the specification.

Applicant respectfully submits that no new matter has been added to the application by the changes to the specification, claims or drawings described herein.

REMARKS

Applicant has amended Figures 1, 2 and 3 of the drawings, the specification and claim 21 of this application to more particularly point out his invention.

In response to the Examiner's specific objections to the drawings, Applicant provides the following remarks.

Load cell

In response to the Examiner's request, the load cell 36 has been identified in the corrected drawing of FIG. 1.

Dampening device for the load cell

The dampening device is customarily an integral part of the load cell. As stated in Paragraph 0039 of the specification, "The rotating receptacle 20 is preferably supported by a fluid restricted strain gauge load cell 36, which dampens the motion of the rotating receptacle." Applicant has amended claim 21 to more particularly claim this aspect of his invention. Because, in the preferred embodiment, the dampening device is an integral part of the load cell, further identification is not necessary.

Rotatable mounting between the load cell and the receptacle

The rotatable mounting between the load cell and the receptacle can be achieved using a variety of structures. For example, as stated in Paragraph 0021 of the specification, the rotatable mounting between the load cell and the receptacle can be achieved by using "an axle 38 for

rotatably mounting the rotating receptacle,” and “two vertical supports 40 for supporting” the receptacle on the load cell.” These exemplar structural elements are identified in Figure 2.

A/D converter and data processor

As stated in Paragraph 0021 of the specification, “The weight signal processor preferably comprises an A/D converter and a data processor with digital processing capability, such as a PC.” As shown in FIG 1, the A/D converter is identified as element 24 and data processor is identified as element 28.

In view of the foregoing amendments and remarks, Applicant respectfully requests withdrawal of the objections to the drawings.

Turning now to the prior art rejections, in the Office Action, the Examiner rejected the Examiner has rejected Claims 1-7 and 12-19 as anticipated by Krolopp, U.S. patent no. 3,539,028, Claims 8-11 and 20 as obvious over Krolopp in view of Smith et al., U.S. patent no. 4,130,171, and Claim 21 as obvious over Krolopp in view of Smith and further in view of Hebenstreit, U.S. patent no. 6,441,321.

Before discussing the Examiner’s specific ground of rejection, it would be useful to briefly review the claimed invention, which is generally directed to an apparatus and method for automatically weighing preexisting portions of semi-solid matter using a weigh station having a rotating receptacle. As disclosed in the specification, the rotating receptacle is powered by a drive motor through a disengageable motor drive connection which serves “to prevent contact during the weighing operation.” Paragraph 0017. The disclosed disengageable motor drive connection thus provides the capability “to selectively and completely disengage during the weighing process, thus eliminating extraneous inputs to the load cell from contact with the drive motor.” Paragraph 0017.

Paragraph 0014 of the specification confirms the complete physical separation between the weigh station and the drive motor provided by Applicant's disengagable motor drive: "the present invention preferably comprises a weigh station, a servo drive motor, and a selectively disengagable motor drive connection which transfers rotational motion from the drive motor to the weigh station." As stated in Paragraph 0015 of the specification, "the weigh station preferably comprises a rotating receptacle, and a load cell, an axle for mounting the rotating receptacle to the load cell." The fact that the motor is mounted independent of the load cell of the weigh station is further confirmed in Paragraph 0019: "The drive motor may drive one weight station through a single motor drive connection, or multiple weigh stations through a gang drive mechanism, comprising a plurality of output shafts and motor drive connections driven by a single motor." Thus, in applicant's invention, when the motor drive connection is disengaged, there is no physical contact whatsoever between the motor and any portion of the weigh station supported by the load cell.

By contrast, Krolopp does not disclose a disengageable motor drive connection that provides the capability to completely disengage a drive motor from the load cell during the weighing process, thus eliminating extraneous inputs to the load cell from contact with the drive motor. Krolopp merely describes a pneumatic cylinder supported by a load cell, which drives a rotating bucket through a one-way clutch. Consequently, even when not driving the bucket, the pneumatic cylinder is always in contact with the load cell, and therefore, affects the accuracy of the resulting weight indication. This arrangement does not provide the complete physical separation between the weigh station and the drive motor provided by Applicant's disengagable motor drive. Accordingly, Krolopp does not disclose the disengageable motor drive connection

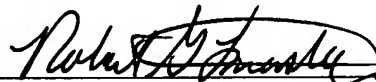
as described and claimed by Applicant and cannot anticipate Applicant's claims under 35 U.S.C. § 102(b).

Further, for the same reason, Krolopp cannot serve as a valid reference for claim rejections under 35 U.S.C. § 103(a). Although applicant respectfully asserts that none of the three cited patents disclose or suggest other limitations included in the rejected claims, applicant believes that the absence of the disengageable motor drive connection alone, as discussed above, resolves the Examiner's concern. Accordingly, in the interest of efficiency, applicant elects to forgo further argument on these other limitations not present in the cited patents. In foregoing discussion of these additional limitations not present in the cited patents, applicant does not waive his right to fully discuss the other limitations, if necessary, in the future.

This disengageable motor drive connection limitation is neither disclosed in or suggested by any of the cited references, either alone or in combination. As the Examiner has not pointed out where in any of the three cited patents such positioning means is disclosed, the Examiner has failed to establish a prima facie case of obviousness because the combination of the cited references does not teach or suggest all of the limitations of the independent claims. See In re Royka, 490 F.2d 981, 985 (CCPA 1974); MPEP 2143.03. For these reasons, applicant respectfully submits that the independent claims are nonobvious and allowable. Hence, the dependent claims, must also be nonobvious because they depend from nonobvious base claims. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Applicant respectfully asserts that the rejections under Section 103 should be withdrawn.

In light of the foregoing remarks, it is submitted that this application is in condition for allowance and prompt and favorable reconsideration is respectfully requested. The Examiner is encouraged to contact the undersigned via telephone to resolve any outstanding issues.

Respectfully submitted,

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